### REMARKS AND ARGUMENTS

### A. Drawings

The examiner objected to the informal drawings filed with the application. In response to the objection, the applicant submitted formal drawings in a transmittal mailed December 12, 2006. The formal drawings added no new matter and are believed to overcome the examiner's objection.

# B. Prior Art Rejections

Claims 1-31 were examined. The examiner rejected all of these claims as being obvious under 35 U.S.C. § 103(a) in light of the combination of U.S. Patent No. 6,606,502 ("Chung Kam Chung") with Published U.S. Patent Application No. 2005/0096059 ("Jiang").

### C. Overview of Differences between the Invention and the Prior Art

Unlike the systems disclosed in Chung Kam Chung and Jiang, the examples described in the present application enable the message creator to choose whether, given the level of delay, a particular message should be delivered at all.

In the system of Chung Kam Chung, the mobile switching center (MSC) analyzes its own resources to determine whether or not it has the capability to handle a periodic broadcast SMS message. In that system, though, the SMS message is delivered to its recipients regardless of the capabilities of the MSC. In particular, the level of available resources at the MSC determines only who handles the "periodicity" of the periodic broadcast message, not whether the message will be delivered at all. The MSC handles

the periodicity of the message if it is able to do so, and the message center (MC) handles the periodicity otherwise. In either case, the message is ultimately delivered through the MSC.

For example, Chung Kam Chung describes at col. 8, lines 1-14 that if "the MSC 12 cannot handle the periodic broadcast SMS on its own, the MC 22 . . . periodically sends a corresponding regular broadcast SMS request to the MSC 12." Again in col. 10, lines 10-22, Chung Kam Chung confirms that messages are delivered even where the MSC has "a shortage of resources."

[T]he MC 12 will handle the periodicity of the request on its own...by sending regular broadcast SMS requests to the MSC 12 (known to be less demanding in MSC's processing resources compared to a periodic broadcast SMS request), at regular intervals of time.

Id.

Because the disclosures of Chung Kam Chung and of Jiang are not concerned with whether an SMS message will be delivered at all, they neither disclose nor suggest providing information on the capacity of the MSC before a decision is made as to whether a message should be delivered. As is shown in Figures 3a, 4a, and 5, the system of Chung Kam Chung provides that information to the message center only after the SMS message has been composed and sent to the mobile switching center and is destined for delivery.

In contrast, the examples described in the present application enable the originator of a message to choose whether, given the level of delay, the message should be delivered at all. As described in the specification, this provides useful advantages to the originator, advantages not recognized or achieved in the prior art of record. One circumstance in which this feature is particularly useful is described in the specification:

As an example, consider a service provider that sends regular updates of the score of a basketball game in progress. The service provider can reduce the likelihood that the scores will be outdated when they are received if it creates messages only when the expected delay is sufficiently low. In contrast, if the service provider were to create the message while the expected delay was high, a team may score several times before the service provider even sent the message.

Specification, at 10-11. Unlike the disclosures of Chung Kam Chung and Jiang, the examples described in the present application give the message originator control over how a message is to be handled.

For example, if a particular message must get to a recipient as soon as possible, then the sender may send the message to the gateway regardless of the expected delay. On the other hand, if it is important that the message be as up-to-date as possible at the time it is received, the sender can communicate with the delay manager to determine when the expected delay is low.

## Specification at 11.

Certain of these new and useful characteristics of the examples described in the present disclosure are reflected in one or more of the independent claims 1, 14, 23, 28, and 30, as amended, and in the claims that depend from them. Accordingly, as described in detail below, each of these claims is believed to distinguish over the prior art of record and to merit a finding of patentability.

# D. Claims 1, 14, 28, and 30

Claims 1, 14, 28, and 30 as amended each recite, among other limitations, that an electronic message is sent "only if the expected delay is less than the threshold delay." As described above, the disclosure of Chung Kam Chung teaches that a message is delivered even when the MSC has "a shortage of resources." Following the teachings of Chung Kam Chung, it is not necessary to withhold delivery of a message even in cases of such a

shortage, since a "regular broadcast SMS" is "known to be less demanding in MSC's processing resources." Col. 10, lines 10-22. What neither Chung Kam Chung nor Jiang appreciate is that some messages may not be worth delivering at all if they will be outdated by the time they are received.

Claims 1, 14, 28, and 30 further recite that the "delay" in question is a delay in "delivery of [an] electronic message." The examiner recognizes that Chung Kam Chung "fails to clearly disclose wherein a delay report includes information on the length of the expected delay," Office Action, page 3, and cites Jiang to compensate for the absence of this element. In Jiang, however, the delay mentioned is not a delay in the delivery of an electronic message, but rather a delay in the time it takes to gain access to a network.

For the purposes of the present disclosure, the delay may correspond with a time interval between a first instant that a subscriber initiates a service request to a provider's network—or, in the alternative, the instant when a service request is autonomously initiated at a predefined (e.g., periodic or aperiodic) moment in time—and a second instant in which service access is granted to the subscriber.

Par. 0015.

The invention claimed in independent claims 1, 14, 28 and 30 thus distinguishes over the prior art of record at least with respect to the type of delay at issue and also with respect to how the existence of a delay affects message delivery. Accordingly, these claims and those that depend from them are not obvious and are believed to be patentable over the prior art of record.

## E. Claim 15

Claim 15 depends from claim 14 and further recites that the electronic message is not created until a determination is made that the expected delay is less than the threshold

delay. As described in section C above, Chung Kam Chung does not provide information on the resources available to the MSC until after the message has been sent by the originator and received at the MSC. Of course, the message must be created even before it is sent, so these references do not teach creating a message only after a determination is made concerning the delay. For this reason, in addition to the reasons given above with respect to base claim 14, claim 15 is patentable over the prior art of record.

#### F. Claim 23

Independent claim 23 has been amended to incorporate the limitations of dependent claim 24 (which has now been canceled). The Office Action did not identify any specific basis for rejection of claim 24 and, accordingly, does not establish a *prima* facie case of obviousness. In particular, the Office Action does not identify where in the prior art can be found the claimed feature of a "subscriber data storage," where delay reports are generated for subscribers. The applicant does not believe that such a feature, in the claimed combination, is disclosed in either Chung Kam Chung or Jiang. Notably, as described in section F above, the type of delay described in Jiang—a delay in gaining access to a network—is different from that recited in claim 23—a delay in "delivery of an electronic message." Accordingly, claim 23 and those that depend from it are believed to be patentable over the prior art of record.

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# G. Conclusion

The Applicant believes the claims are in a condition for allowance. If the Examiner has any questions regarding the application, the Applicant's representative may be contacted at 312-913-2115.

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